REMARKS

Applicants have amended the claims to recite that the elements of the control system controls the molding fluid and molding fiber operational parameters. Support for the amendment is found at page 3, lines 4-20 and page 7, lines 10-20.

Before discussing the rejections in the case, Applicants note that the Examiner has imposed new rejections based on a new argument referencing a new set of prior art never before seen by Applicants. Applicants have had no chance to previously respond to this argument. Under this scenario, the Examiner is not entitled to make this Office Action final. Applicants respectfully request the Examiner withdraw the finality of this rejection and return this case to an Action on the merits in a non-final form. Applicants have left a phone message on this issue with the Examiner.

In paragraph 1 of the action the Examiner comments on unlabeled portions of the figures. The Figures are corrected in this action. Formal drawings will be submitted in due time.

In paragraphs 2 and 3 of the Examiner's Action, the Examiner has rejected claims 1, 4, 5, 9, 10, 13, 14, 18, 19, 22, 23 and 27 over Bone, U.S. Patent No. 6,647,309 in view of Kline et al., U.S. Patent No. 5,207,956. Applicants respectfully traverse the rejection.

Before discussing the art rejection, Applicants point out that the invention relates to a remote control aspect for controlling two or more manufacturing locations. For the purpose of remote control, Applicants assert that the control mode is obtained by controlling a process using equipment that could be as far away as on separate continents, in separate states in the United States or in separate buildings in different operating or manufacturing areas. Further, the control technology is real-time control in which the operating parameters are consistently measured and modified for optimization purposes. The parameters disclosed in the invention involve the flow rates, temperatures, reaction times and other process conditions that occur in the molded fiber and resin materials that are monitored and adjusted on a real time basis.

The Examiner has cited Bone as a main reference in this area. First, Bone is clearly not a system designed for remote monitoring. The context of Bone is the monitoring of environmental conditions in the same locale as the process equipment. It appears from the figures of Bone that the monitoring equipment is either mounted on or adjacent to the semiconductor platform. In Bone remote merely relates to a location not simply on the process equipment. Secondly, Bone does not monitor process characteristics of the process itself. Bone measures environmental

characteristics including atmospheric gasses, atmospheric pressure and atmospheric humidity. While these parameters may have some impact on semiconductor manufacture, the measurements are not directed to the measurement of process conditions as it relates to the status of the semiconductor product (i.e.) temperature of the semiconductor, composition of the semiconductor or the processing rates of the semiconductors per se. Further, the control mechanism of Bone does not appear to be a real-time monitoring of the process conditions. In Bone, the method involves episodic generation of test wafer generation to measure whether or not the test semiconductors wafers have appropriate characteristics. This is clearly different than the claimed process that requires a consistent, constant monitoring of test conditions and a real-time feedback to improve test conditions on a real-time basis. In summary, Bone is not directed to: (1) remote control as the term is used in the invention; (2) monitoring the process parameters; and (3) real-time feed back control.

In order to rectify the failures of Bone, the Examiner has cited Kline et al. The Examiner argues that any deficiency of Bone is found in Kline et al. The references are simply not combinable. Examiner argues that these references are combinable because they both relate to the art of manufacturing process control and, since automated process control systems can be applied to a variety of different types of manufacturing systems, it would have been obvious to one of ordinary skill in the art to modify Bone to obtain the claimed invention.

Applicants disagree with the Examiner's position that these references are combinable. If Bone operated on a real-time basis directed to process conditions of the materials during manufacture and was used to modify the process parameters on a real-time basis, there may be some argument for combining these references. However, since Bone is directed to semiconductor process control in which the process is not directly monitored and is not modified on a real-time basis, the references are not combinable. The process controls are so different, the process materials are so different and the ultimate control mechanisms are so different, the two references are simply so remote they cannot logically be combined. There is certainly nothing in either reference that would suggest that one of ordinary skill in the art could modify a semiconductor process controls to controlling thermoset reinforced resin compositions. Also, there is nothing in Kline et al. that would suggest that these curing systems could be modified for use in semiconductor manufacture. In fact, should the semiconductor control system be used in the Kline et al. materials, no effective control would be obtained since it is episodic only and not

real time. Similarly, the Kline et al. control systems could not be used on a semiconductor line to test the semiconductor materials for operational parameters since Kline involves a resin in an autoclave. Bone simply is not structured to measure any parameter of Kline. More importantly, the Bone system cannot be used on a real-time basis to monitor process conditions and to modify process conditions on a real-time basis.

Returning to the basis of the rejection, there is absolutely nothing in either Bone or Kline et al. that relates to simultaneously and remotely controlling a manufacturing process for manufacturing composite articles at two or more manufacturing locations. Bone clearly relates to controlling a single manufacturing system with a single control system. Similarly, Kline et al. relate to a single autoclave control. Unless the Examiner can show that the references teach (1) true remote sensing, (2) real time feed back and control and (3) simultaneous control of two or more manufacturing, the rejection should be withdrawn.

In view of the above amendments and remarks, Applicants respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

3 Feb '04
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Inventor: KIRII A. II et al.
Docket No.: 13174.70US11
Title: PROCESS AND DEVICE TO CONTINUOUSLY MONITOR AND CONTROL A MANUFACTURING PROCESS
Serial No.: 09/922,431
Sheet 2 of 3

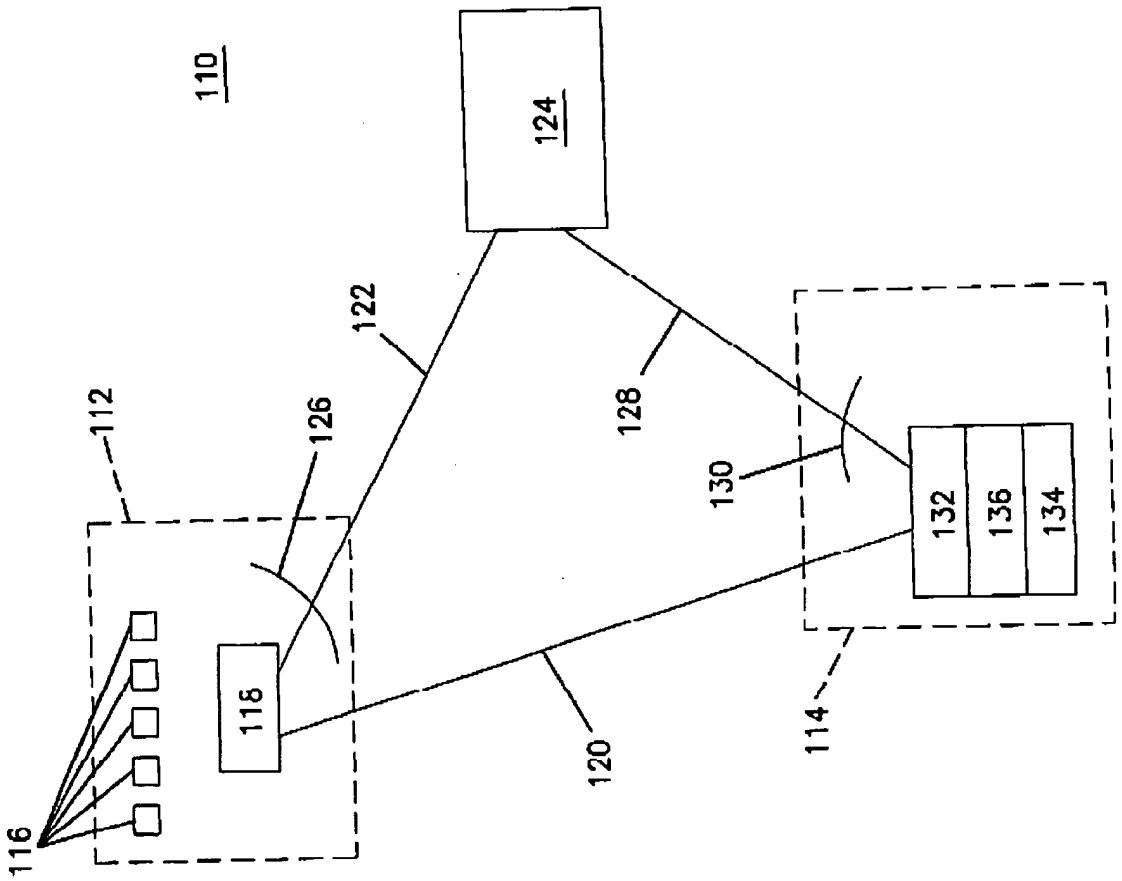

FIG. 3

Inventor: KIRILA, II et al.
Docket No.: 13174.7US11
Title: PROCESS AND DEVICE TO CONTINUOUSLY MONITOR AND CONTROL A MANUFACTURING PROCESS
Serial No.: 09/922,431
Sheet 3 of 3

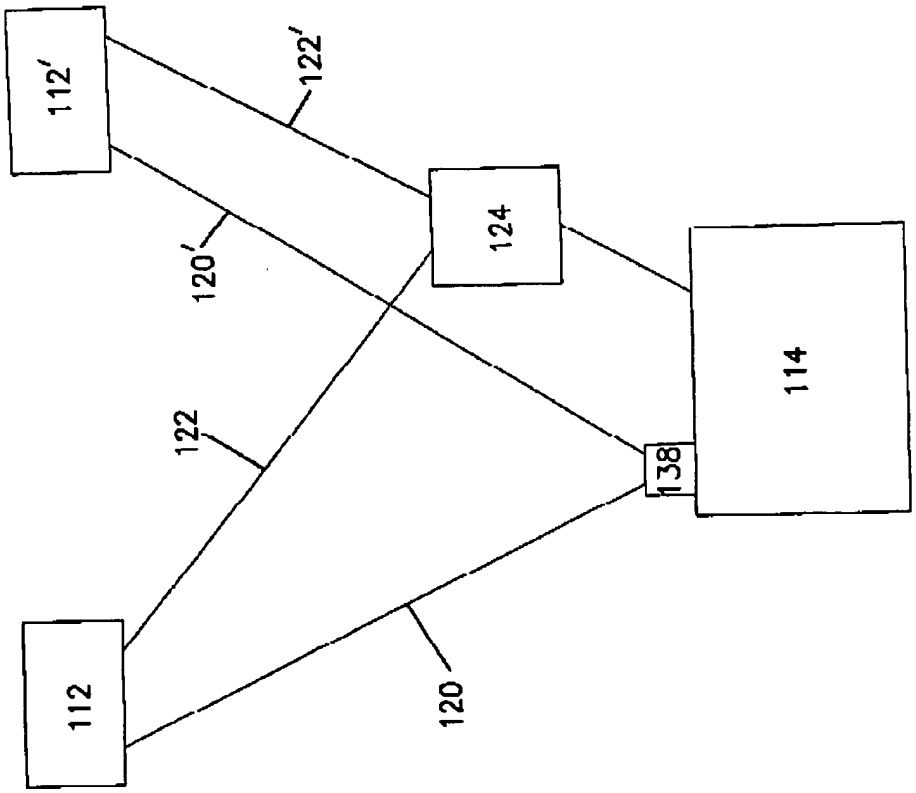

FIG. 4